

**APPLICATION TO THE
MINNESOTA ENVIRONMENTAL QUALITY BOARD**

FOR A

**GAS PIPELINE ROUTE PERMIT
AND
PARTIAL EXEMPTION FROM PIPELINE ROUTE
SELECTION PROCEDURES**

**BLUE LAKE GENERATING PLANT
EXPANSION PROJECT**

EQB DOCKET NO. _____

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**Application for a Gas Pipeline Route Permit
and
Partial Exemption from Pipeline Route Selection
Procedures
Blue Lake Generating Facility Expansion Project**

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Application for Gas Pipeline Route Permit Content Requirement and Completeness Checklist

Authority	Required Information	Location of Required Content
4415.0115	GENERAL INFORMATION.	
Subp. 1.	Cover letter. Each application must be accompanied by a cover letter signed by an authorized representative or agent of the applicant. The cover letter must specify the type, size, and general characteristics of the pipeline for which an application is submitted.	Cover Letter
Subp. 2.	Title page and table of contents. Each application must contain a title page and a complete table of contents.	Title Page and Table of Contents
Subp. 3.	Statement of ownership. Each application must include a statement of proposed ownership of the pipeline as of the day of filing and an affidavit authorizing the applicant to act on behalf of those planning to participate in the pipeline project.	Cover Letter, Section 1
Subp. 4.	Background information. Each application must contain the following information:	
A.	the applicant's complete name, address, and telephone number;	1.3
B.	the complete name, title, address, and telephone number of the authorized representative or agent to be contacted concerning the applicant's filing;	1.3
C.	the signatures and titles of persons authorized to sign the application, and the signature of the preparer of the application if prepared by an outside representative or agent; and	1.3
D.	a brief description of the proposed project which includes:	Section 1
(1)	general location;	1.1
(2)	planned use and purpose;	1.2

(3)	estimated cost;	1.1, 2.6
(4)	planned in-service date; and	1.4
(5)	general design and operational specifications for the type of pipeline for which an application is submitted.	1.1
4415.0120	DESCRIPTION OF PROPOSED PIPELINE AND ASSOCIATED FACILITIES.	
Subp. 1.	Pipeline design specifications. The specifications for pipeline design and construction are assumed to be in compliance with all applicable state and federal rules or regulations unless determined otherwise by the state or federal agency having jurisdiction over the enforcement of such rules or regulations. For public information purposes, the anticipated pipeline design specifications must include but are not limited to:	2.1
A.	pipe size (outside diameter) in inches;	
B.	pipe type;	
C.	nominal wall thickness in inches;	
D.	pipe design factor;	
E.	longitudinal or seam joint factor;	
F.	class location and requirements, where applicable;	
G.	specified minimum yield strength in pounds per square inch; and	
H.	tensile strength in pounds per square inch.	
Subp. 2.	Operating pressure. Operating pressure must include:	2.2
A.	operating pressure (psig); and	
B.	maximum allowable operating pressure (psig).	
Subp. 3.	Description of associated facilities. For public information purposes, the applicant	2.3

	shall provide a general description of all pertinent associated facilities on the right-of-way.	
Subp. 4.	Product capacity information. The applicant shall provide information on planned minimum and maximum design capacity or throughput in the appropriate unit of measure for the types of products shipped as defined in part 4415.0010 .	2.4
Subp. 5.	Product description. The applicant shall provide a complete listing of products the pipeline is intended to ship and a list of products the pipeline is designed to transport, if different from those intended for shipping.	2.4
Subp. 6.	Material safety data sheet. For each type of product that will be shipped through the pipeline, the applicant shall provide for public information purposes the material identification, ingredients, physical data, fire and explosive data, reactivity data, occupational exposure limits, health information, emergency and first aid procedures, transportation requirements, and other known regulatory controls.	Appendix A
4415.0125	LAND REQUIREMENTS. For the proposed pipeline, the applicant shall provide the following information:	2.5
A.	permanent right-of-way length, average width, and estimated acreage;	
B.	temporary right-of-way (workspace) length, estimated width, and estimated acreage;	
C.	estimated range of minimum trench or ditch dimensions including bottom width, top width, depth, and cubic yards of dirt excavated;	
D.	minimum depth of cover for state and federal requirements; and	
E.	rights-of-way sharing or paralleling: type of facility in the right-of-way, and the estimated length, width, and acreage of the right-of-way.	
4415.0130	PROJECT EXPANSION. If the pipeline and associated facilities are designed for expansion in the future, the applicant shall provide a description of how the proposed	1.2

	pipeline and associated facilities may be expanded by looping, by additional compressor and pump stations, or by other available methods.	
4415.0135	RIGHT-OF-WAY PREPARATION PROCEDURES AND CONSTRUCTION ACTIVITY SEQUENCE. Each applicant shall provide a description of the general right-of-way preparation procedures and construction activity sequence anticipated for the proposed pipeline and associated facilities.	5.1
4415.0140	LOCATION OF PREFERRED ROUTE AND DESCRIPTION OF ENVIRONMENT.	
Subp.1.	Preferred route location. The applicant must identify the preferred route for the proposed pipeline and associated facilities, on any of the following documents which must be submitted with the application:	3.1
A.	United States Geological Survey topographical maps to the scale of 1:24,000, if available;	See Item C.
B.	Minnesota Department of Transportation county highway maps; or	See Item C.
C.	aerial photos or other appropriate maps of equal or greater detail in items A and B. The maps or photos may be reduced for inclusion in the application. One full-sized set shall be provided to the board.	Figures 1-1 and 1-2, Appendix B
Subp. 2.	Other route locations. All other route alternatives considered by the applicant must be identified on a separate map or aerial photos or set of maps and photos or identified in correspondence or other documents evidencing consideration of the route by the applicant.	3.3, Figure 1-2
Subp. 3.	Description of environment. The applicant must provide a description of the existing environment along the preferred route.	Section 4

4415.0145	ENVIRONMENTAL IMPACT OF PREFERRED ROUTE. The applicant must also submit to the board along with the application an analysis of the potential human and environmental impacts that may be expected from pipeline right-of-way preparation and construction practices and operation and maintenance procedures. These impacts include but are not limited to the impacts for which criteria are specified in part 4415.0040 or 4415.0100 .	Section 4
4415.0040, Subp.3	CRITERIA FOR PARTIAL EXEMPTION FROM PIPELINE ROUTE SELECTION PROCEDURES.	
A.	human settlement, existence and density of populated areas, existing and planned future land use, and management plans;	4.1
B.	the natural environment, public and designated lands, including but not limited to natural areas, wildlife habitat, water, and recreational lands;	4.2
C.	lands of historical, archaeological, and cultural significance;	4.3
D.	economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations;	4.3
E.	pipeline cost and accessibility;	2.6, 1.2
F.	use of existing rights-of-way and right-of-way sharing or paralleling;	2.5
G.	natural resources and features;	4.2
H.	the extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in part 4415.0185 for pipeline right-of-way preparation, construction, cleanup, and restoration practices;	Section 4
I.	cumulative potential effect of related or anticipated future pipeline construction; and	Section 4
J.	relevant policies, rules, and regulations of the state and federal agencies and local government land use laws including ordinances adopted under Minnesota Statutes, section 299J.05 , relating to the location, design,	Section 4

	construction, or operation of the proposed pipeline and associated facilities.	
4415.0150	RIGHT-OF-WAY PROTECTION AND RESTORATION MEASURES.	
Subp.1.	Protection. The applicant must describe what measures will be taken to protect the right-of-way or mitigate the adverse impacts of right-of-way preparation, pipeline construction, and operation and maintenance on the human and natural environment.	Section 4, 5.1.7
Subp. 2.	Restoration. The applicant must describe what measures will be taken to restore the right-of-way and other areas adversely affected by construction of the pipeline.	5.1.7
4415.0160	OPERATION AND MAINTENANCE. Pipeline operations and maintenance are assumed to be in compliance with all applicable state and federal rules or regulations, unless determined otherwise by the state or federal agency having jurisdiction over the enforcement of such rules or regulations. For public information purposes, the applicant must provide a general description of the anticipated operation and maintenance practices planned for the proposed pipeline.	5.2
4415.0165	LIST OF GOVERNMENT AGENCIES AND PERMITS. Each application must contain a list of all the known federal, state, and local agencies or authorities and titles of the permits they issue that are required for the proposed pipeline and associated facilities.	1.5

1 Introduction

1.1 Overview

Northern States Power Company, doing business as Xcel Energy (“Xcel Energy”), is expanding its existing Blue Lake Generating Plant in Shakopee, Minnesota (the “Plant”) with the addition of two simple-cycle combustion turbine generators (Figure 1-1). The Plant will be interconnected with a to-be-constructed meter station near the Northern Natural Gas Company’s (NNGC) interstate natural gas pipeline via a new pipeline (the “Project”). Figure 1-2 shows the Plant site and the proposed routing of the interconnecting pipeline.

The Project requires the construction of about 11 miles of 16-inch diameter steel pipeline between the generating station and the existing NNGC pipeline. The pipeline is designed to deliver between 76.8 and 148.8 million cubic feet of natural gas per day at a nominal operating pressure of 530 to 950 psig. The pipeline is to be placed in service in March 2005 for an estimated cost of \$7.65 million.

Minn. Stat. Sec. 116I.015 subd. 2 provides for the partial exemption of certain routes from the pipeline routing procedures ordinarily required for a pipeline under the statute. The rules under which the statute is implemented are cited at Minn. Rules pt. 4415.0020 subp. 3 whereby the “... board may exempt a proposed pipeline from part of the pipeline routing permit procedures ... if the board determines that the proposed pipeline will not have a significant impact on humans or the environment.”

In accordance with Minn. Stat. Sec. 116I.015 subd. 2, as implemented through Minn. Rules pt. 4415.0020 subp. 3, Xcel Energy is requesting a pipeline route permit and a partial exemption from the pipeline routing permit procedures otherwise required under Minn. Rules Chapter 4415 for the routing of a pipeline from the to-be-constructed meter station on the existing NNGC pipeline to the Plant site. This application contains the applicable information required by Minn. Rules Chapter 4415 in support of this request.

1.2 Purpose

The primary purpose of the pipeline project is to provide a natural gas fuel supply to the expanded Blue Lake Generating Plant. The expanded plant will provide Xcel Energy’s customers with a low cost, dedicated source of electric generation and will help Xcel Energy meet electricity demands during peak

consumption periods. The expansion project will consist of two combustion turbine-generators, each nominally rated at a net 160MW, to provide the Plant with a nominal additional, net electric generating capacity of 320 MW. The combustion turbines will operate in simple-cycle mode and will be capable of providing accredited capacity within the Mid-Continent Area Power Pool (MAPP).

Xcel Energy may choose to use the pipeline to serve other customers, but no specific customers or service areas have been identified at the time of this application filing. At the present time, there are no plans to expand the capacity of this pipeline.

1.3 Applicant Information

Applicant's Complete Name, Address, and Telephone Number:

Xcel Energy
800 Nicollet Mall
Minneapolis, MN 55402
1-800-328-8226

Complete Name, Title, Address, and Telephone Number of the Authorized Representative or Agent to be Contacted Concerning this Filing:

James R. Alders
Manager, Regulatory Administration
414 Nicollet Mall
Minneapolis, MN 55401
612-330-6732

Signature and Title of the Person Authorized to Sign this Application:

Tim Taylor
Vice President, Asset Management & Field Operations
Xcel Energy

1.4 Schedule

Construction will begin as soon as all permits and right of way have been acquired. Xcel Energy has a target in service date of March 1, 2005 for the pipeline.

1.5 Other Required Permits

This section addresses the requirements of Minnesota Rules 4415.0165 to list known permits required for the project.

Known government agency jurisdictions and permits/approvals required are listed below:

- The Minnesota Environmental Quality Board requires a pipeline routing permit for the Pipeline project. Although Xcel Energy is seeking a partial exemption from the pipeline routing process, MEQB will still issue a pipeline routing permit.
- Road crossing permits will be required from the Scott County Highway Department and the Minnesota Department of Transportation.
- The Minnesota Pollution Control Agency will administer the nationwide storm water permit for construction activity required due to the anticipated disturbance of more than 1 acre during construction.
- A project notification will be sent to the Minnesota Office of Pipeline Safety.
- MDNR Wetland Replacement Plan Application
- U.S. Army Corps of Engineers Section 404 Wetland Permit

In connection with the Blue Lake Generating Plant expansion project, Xcel Energy is pursuing permits and approvals as required for development of the Plant. Xcel Energy has previously filed applications for a Certificate of Need (CON) from the Minnesota Public Utilities Commission (MPUC) and concurrent with this application is applying for a Site Permit from the Minnesota Environmental Quality Board (MEQB). These approvals are needed prior to issuance of environmental permits for the Plant by the other state agencies.

2 Description of Proposed Pipeline and Associated Facilities

This section provides details of the design of the Project as they are known as of the date this application was prepared. To the extent that changes in design details would be subject to review by the MEQB, the Permittee will submit information regarding such changes and seek a permit amendment, if required, as allowed under Minn. Rules pt. 4415.0185

2.1 Pipeline Design Specifications

In accordance with Minn. Rules pt. 4415.0120 subp. 1, the following pipeline design specifications are provided for public information purposes.

- A. Pipe size (outside diameter) in inches – 16.0 inches
- B. Pipe type – Steel with welded joints.
- C. Nominal wall thickness in inches – 0.250 inches.
- D. Pipe design factor – the entire project is being designed to a Class 3 location design factor of 0.50.
- E. Longitudinal or seam joint factor – 1.00
- F. Class location and requirements – the entire length of the pipeline will be considered Class 3 for design and operation purposes.
- G. Specified minimum yield strength in pounds per square inch – 65,000 psig.
- H. Tensile strength in pounds per square inch – 77,000 psig.

2.2 Operating Pressure

The normal and maximum allowable operating pressures for the pipeline are:

- A. Operating pressure – 530 to 950 psig.
- B. Maximum allowable operating pressure – 1015 psig

2.3 Associated Facilities

The pipeline route originates at the existing Northern Natural Gas interstate pipeline adjacent to Zumbro Avenue and about 1000 feet north of 170th Street in the south half of Section 2 in Sand Creek Township in Scott County. Xcel Energy will take delivery of the natural gas from Northern Natural Gas at a new town border station constructed about 1000 feet north of the interstate pipeline.

The town border station will contain above and below ground piping and various equipment to measure, monitor and odorize the natural gas being delivered into the pipeline. Specifically, the station will include a gas meter to measure gas deliveries into the pipeline, a pipeline shut off valve with remote control operation, monitors for pressure, flow and temperature, and the telemetry systems to bring station information back to Xcel Energy's gas control operators. The measurement equipment will be housed inside a building within a fenced area. The shut off valves will be located outside of the building for quick access. Entry and exit point piping will be constructed at the town border station and at the Plant end of the pipeline to allow for pipeline pigging to comply with federal pipeline integrity testing regulations.

One above-ground sectionalizing valve and the associated blow down piping will be placed along the pipeline route. These will be located along the pipeline easement and protected from traffic by fencing and/or barricades. Markers and cathodic protection test lead posts will be installed along the pipeline route as required by state and federal codes.

At the Blue Lake Generating Plant, equipment inside the fence will include above and below ground piping, a gas meter, pressure control equipment, a shutoff valve, and telemetry equipment.

2.4 Product Description and Capacity Information

The proposed Pipeline project will be used to ship pipeline quality natural gas only. Material safety data sheets (MSDS) for natural gas and odorant additive are included Appendix A.

The planned minimum and maximum design capacities of the pipeline are as follows:

- A. Minimum design capacity – 76.8 million cubic feet of natural gas per day (76.8 Mcfd)
- B. Maximum design capacity – 148.8 million cubic feet of natural gas per day (148.8 Mcfd)

2.5 Land Requirements

Estimates of land use requirements are provided as follows:

- A. Permanent right-of-way length, average width, and estimated acreage:
 - a. Right-of-way length – 11 miles
 - b. Average right-of-way width – 30 feet along Zumbro Avenue, 130th Street and Koeper Avenue; 50 feet along U.S. Highway 169
 - c. Estimated acreage within right-of-way – 52 acres
- B. Temporary right-of-way (workspace) length, estimated width, and estimated acreage:
 - a. Right-of-way length – 11 miles
 - b. Average right-of-way width – 20-25 feet

Permission to use temporary workspace will be obtained from landowners adjacent to the permanent right of way. Xcel Energy plans to obtain a general right of access to the right of way, which would include temporary workspace. This area will vary as needed but will average approximately 20-25 feet.

- c. Estimated acreage within right-of-way – 30 acres(in addition to permanent right-of-way)

Typical Project right-of-way requirements are illustrated in Figures 2-1a and 2-1b.

- C. Estimated range of minimum trench or ditch dimensions including bottom width, top width, depth, and cubic yards of dirt excavated:
 - a. Estimated trench bottom width - 28 inches

- b. Estimated trench depth - 74 inches
- c. Estimated trench top width - 28 inches
- d. Estimated excavation – 100,000 cubic yards

D. Minimum depth of cover for state and federal requirements: 54 inches

The typical Project pipeline installation is shown in Figure 2-2.

E. Rights-of-way sharing or paralleling: type of facility in the right-of-way, and the estimated length, width, and acreage of the right-of-way:

The proposed pipeline route easements will parallel and share a portion of existing road right of way along Zumbro Avenue, 130th Street, Koeber Avenue and U.S. Highway 169. The pipeline will be placed as close as practical to the existing road right of way to minimize impacts to landowners. Portions of the pipeline may also lie within existing transmission corridor easements parallel to the south side of U.S. Highway 169.

2.6 Pipeline Cost

The estimated construction cost of the pipeline to the preferred Plant site is \$7.65 million.

3 Proposed Route

3.1 Proposed Route Location

The proposed pipeline route is shown on Figure 1-2. The pipeline route originates at the existing Northern Natural Gas interstate pipeline adjacent to Zumbro Avenue and about 1000 feet north of 170th Street in the south half of Section 2 in Sand Creek Township in Scott County. The route then follows Zumbro Avenue north to 130th Street (Scott County Road 78), then east along 130th Street about one mile to Koeper Avenue Scott County Road 77). The route parallels Koeper Avenue north to just south of the road's intersection with U.S. Highway 169 within the City of Shakopee. The pipeline route then follows U.S. Highway 169 east to a point just west of Eagle Creek Boulevard (Scott County Road 16) where it will cross under U.S Highway 169. The pipeline route then extends east along the north side of U.S. Highway 169 to the west edge of the Blue Lake Plant site. The pipeline route follows the west and north edges of the Plant site until it will turn south to enter the Plant and terminate at the Plant's gas metering station.

Large scale maps showing the proposed pipeline route in ten segments are provided in Appendix B.

3.2 Right-of-Way Acquisition

Xcel Energy has already initiated contact with local government officials. We will consult with the landowners from whom right-of-way easements may necessary to discuss the Project in detail prior to conducting any necessary surveys and soil investigations. As the design detail for the line is developed, contacts with the owners of affected properties will continue and the negotiation and acquisition phase will begin to obtain the necessary temporary construction and permanent land or easement rights for the pipeline and associated facilities. The typical land requirements for construction and permanent access are described in Section 2.5.

During the acquisition phase, individual property owners will be advised of construction schedules, needed access to the site and any vegetation clearing and soil stripping required for the Project. Any vegetation that is in the way of construction equipment may have to be removed. Wood from the clearing operation will be offered to the landowner or removed from the site. Brush will be chipped and disposed of on the right-of-way.

Some locations may require soil analysis to assist with the design of the pipeline. Xcel Energy will inform the landowners at the initial survey consultation that these borings may occur. An independent geotechnical testing company will take and analyze borings.

Where possible, staging and lay down areas will be located within the right-of-way and limited to previously disturbed or developed areas. When additional property is temporarily required for construction, temporary limited easements may be obtained from landowners. Temporary limited easements will be limited to special construction access needs or additional staging or lay down areas required outside of the proposed transmission line right-of-way.

3.3 Other Considered Routes

The proposed route will result in less disruption to area residents and the natural environment than other possible routes. Xcel Energy examined the area between the Project's fuel source, the Northern Natural Gas interstate pipeline, and the Blue Lake Generating Plant. This area is shown in Figure 1-2. The proposed route was chosen because it is a direct route that is able to take advantage of existing road and highway alignments to minimize additional right-of-way needs. The proposed route also avoids the more heavily developed residential areas and the more environmentally sensitive areas to the east and south.

4 Environment Information

The right-of-way preparation, construction practices and operation and maintenance procedures of the Project along the proposed route will have little or no potential for significant impacts on the human and natural environments. The environment along the proposed routes is described in this section consistent with the considerations outlined in Minnesota Rules 4415.0140 Subp. 3. In accordance with the requirements of Minn. Rules 4415.0145 and 4415.0040, this section also presents an analysis of the potential for human and environmental impacts from the Project.

The pipeline route work involves placement of approximately 11 miles of 16-inch diameter gas pipeline. The pipeline route will temporarily alter land during pipe installation. Most potential for impact is during the Project's construction phase. Xcel Energy will comply fully with the pipeline routing permit conditions (Minnesota Rule 4415.0195) that will apply to right-of-way preparation, construction, cleanup and restoration. We will also comply with all other applicable regulations and permits to ensure impacts resulting from construction of the pipeline project are minimized.

No future pipeline construction is expected except that related to maintenance of the pipeline project. Potential impacts related to maintenance activities are expected to be similar, but of lesser magnitude, to any impacts associated with the original construction.

Xcel Energy is not presently aware of any specific policies which state agencies, federal agencies, or local governmental units have adopted under Minn. Stat. Sec. 299J.05, which would affect any decisions relating to the location, design, construction, or operation of the proposed pipeline project and associated facilities. Section 1.5 of this application includes a list of known governmental permits and approvals required for the pipeline project.

4.1 Human Settlement

4.1.1 Existing Environment

The pipeline will be located entirely in Scott County, Minnesota. The north-south segment of the pipeline route, just under 6 miles long, parallels Zumbro Avenue in Sand Creek and Louisville Townships for about 4 miles, then in Jackson Township runs parallel to 130th Street for a mile and Koeper Avenue

for just under a mile. This is a sparsely populated rural area just south of the City of Shakopee. About two dozen houses are located along this segment of the route. The east-west segment of the pipeline route is parallel to U.S. Highway 169 and crosses under the highway just west of the Blue Lake Generating Plant. This portion of the route lies adjacent to two existing electric transmission lines along most of its length. The western-most ½ mile of the east-west segment lies in Jackson Township, while the remainder is within the City of Shakopee. The area immediately south of US Highway 169 is a fast-developing commercial and multi-unit residential area. The area along the proposed pipeline route north of US Highway 169 is developed as light industrial.

As shown in Figure 4-1, the pipeline route outside of the City of Shakopee passes through areas of urban expansion reserve district (UER), urban business reserve district (UBR), and urban expansion reserve cluster district (UERC) (Scott County, 2001b). The pipeline route extends through areas zone for agriculture (AG), highway business (B1), business park (BP), light industrial (L1), medium density residential (R2), planned residential (PRD), multiple family residential (R3), and rural residential (RR) within the City of Shakopee (City of Shakopee, 2001).

The 2020 Scott County Comprehensive Plan Update (Scott County, 2001a) indicates the pipeline route crosses areas planned for commercial reserve, urban expansion, rural residential and agricultural areas. The pipeline route extends south into one of the few areas in Scott County zoned for agricultural use in the 2020 Comprehensive Plan. The gas pipeline will connect with the Northern Natural Gas Interstate Pipeline that also traverses this agricultural area.

The major traffic routes in the area are US Highway 169, which connects Minneapolis and Mankato (Figure 4-2). Other important area traffic routes include County Highway 101, and County Highways 15 and 17, which are parallel with Zumbro Avenue and the north-south segment of the pipeline route, and County Highways 14, 42, 78 and 160th and 170th Streets that are east-west thoroughfares. The busiest roads in the area include Hwy 169, County Highway 101, County Highway 17 and County Hwy 83 (Figure 4-3). Zumbro Avenue is one of the least frequently traveled road in the area, based on the 2002 traffic counts. No railroads or airports will be impacted by the pipeline.

4.1.2 Potential Impacts and Planned Mitigative Measures

Impacts to human settlement from the pipeline will be limited to temporarily altered access to some of the homesteads along Zumbro Avenue during construction. Sequencing the work to minimize the time driveways are blocked or trenched will minimize this inconvenience to the local residences. Landowners will be notified in advance of the construction schedule and the timing of driveway disturbances. Temporary access or heavy metal plates will be used to maintain access to driveways. Restoration of disturbed driveways will be completed as soon as practicable following construction.

All adjacent and intersected streets and highways along the pipeline route will be kept open during construction. Zumbro Avenue will be the street most impacted by construction with the pipeline being installed immediately adjacent to the street along about 4 miles of its length. The alignment of the pipeline was selected in part because of the low traffic and relatively undeveloped nature of Zumbro Avenue. Horizontal drilling techniques will be used to cross U.S. Highway 169 and all the hard-surfaced roadway and interchange ramps that intersect U.S. Highway 169. Horizontal drilling techniques will also be used to cross County Road 78 (130th Street West) and those techniques will be evaluated for crossing under other roadways. In all cases, road crossing permit requirements will be followed.

Barricades, warning signs and other safety measures will be used to ensure the safety of the public during construction. Around road and driveway crossings, fencing or other types of barricading will be employed to protect public safety.

4.2 Natural Environment

4.2.1 Existing Environment

4.2.1.1 Vegetation and Wildlife

The pre-settlement nature of along the east-west section of the pipeline route was oak openings and barrens. Along the north-south parts of the pipeline route pre-settlement vegetation was primarily upland deciduous forest, with prairie, wet prairie, marshes and open water interspersed throughout (Marschner, 1974).

Since settlement, the pipeline route vicinity has been ditched, tiled and tilled which has effectively drained the area and removed most evidence of the pre-

settlement vegetation. The native oak woods were almost entirely replaced with agricultural crops dominated by corn. Area remnants of pre-settlement vegetation indicated by the Minnesota County Biological Survey are shown in Figure 4-4. Plant species that could potentially be found in the remnants are listed in Table C-1 in Appendix C.

Barr Engineering Co. conducted a field review of the area during October, 2003 and as part of that review examined current vegetation. The present vegetation in the along the pipeline route is primarily agricultural, specifically corn and hay. There are some areas of remnant oak forest, and boxelder-cottonwood forests. These areas are disturbed with buckthorn growing in the shrub layer. There are some managed lawns and ditched areas that are dominated by smooth brome.

The Minnesota National Wildlife Refuge and Recreation Area (MN NWRRA) is approximately 1 mile from the Blue Lake Generating Plant (Figure 4-5). The MN NWRRA and remnants of pre-settlement vegetation that occur along the pipeline route provide some habitat for wildlife. Other wildlife may survive in agricultural fields and hedgerows. A list of potential wildlife species generated from data for the Minnesota Valley Wildlife Refuge is provided in Table C-2 in Appendix C. These wildlife species may also inhabit areas near the pipeline route.

The Natural Heritage Program of the MDNR was contacted and asked to review their database to determine if any rare plant or animal species or other significant natural features are known to occur along the pipeline route. The “Communities of Significant Biodiversity” in the Project vicinity reported by the MDNR are illustrated in Figure 4-4.

The DNR Natural Heritage database search also reported several species of special concern located in the dry oak savanna and oak woodland-brushland area of significant biodiversity located south of the Plant and south of U.S. Highway 169 (see Table C-2 in Appendix C). The pipeline route is north of U.S. Highway 169 in this area so will not impact this sensitive area.

4.2.1.2 Geology and Soils

The relief of Scott County varies from nearly level on the bottom lands and terraces to strongly rolling and hilly on the glacial moraine parts of the upland. The pipeline route extends into rolling areas that are between 900-1000 feet above sea level (Balaban and McSwiggen, 1982). The terrain does not pose any

unusual problems for pipeline construction, operation and maintenance. The surficial geology consists of sandy silty clay and clayey soils that are easily excavated and backfilled with conventional pipeline trenching equipment. Bedrock is not an issue for the pipeline construction at a depth of approximately 50-200 feet along the pipeline route

The dominant parent soil material in Scott County is glacial. Most of the soils formed in glacial till that was deposited directly by the Mankato sub stage of the Wisconsin glaciation. This most recent glacier deposited a light yellowish-brown or light olive-brown, calcareous, moderately fine textured material of variable thickness.

The soil association map in Figure 4-6 illustrates the soil associations along the pipeline route (Cummins and Edwards, et al, 1959). A soil association map is useful in comparing the suitability of large areas for general land uses. It is not a suitable map for planning the management of a farm or field or for selecting a site for a structure because the soils in each association differ in slope depth, drainage or other characteristics that affect their management.

Approximately half of the pipeline route is along areas containing “prime farmland” soils, as defined by Minnesota Rules 4400.3450, Subp.4. The soil association along the pipeline route is underlain primarily by rolling to nearly level soils. The soils along the pipeline route are classified as follows: 11% Lester silt loam, 2-6 percent slopes; 10% Dakota loam, 0-2 percent slopes; 8% Waukegan silt loam, 0-2 percent slopes; 7% Zimmerman fine sand, 0-2 percent slopes; 7% Lester silt loam, 2-6 percent slopes, moderately eroded; and 5% Webster-Glencoe silty clay loams, with the remaining soils making up less than 5% of the pipeline route soils.

Lester silt loams are moderately dark-colored soils that are well drained, and developed under tall prairie grasses. Dakota loams are on sandy outwash plains and terraces. They are dark-colored, well drained to excessively drained soils that formed under prairie grass. The top layers are dark-brown to brown loam, with weak fine granular structure. Waukegan silt loams are dark-colored soils that formed under tall native grasses on silty materials deposited over sandy river terraces and outwash plains. This soil is one of the best agricultural soils of the terraces. The Zimmerman fine sands soils are light-colored, windblown sands on the terraces between Shakopee and Savage. Zimmerman soils are subject to severe drought, as they have little moisture-holding capacity, and wind erosion is active. Webster-Glencoe soils are dark-colored, and range from

moderately well to very poorly drained. Surface layers are black silty clay loams, with subsoil being very dark brown clay loam. Underlying materials are olive-gray to clay loam with prominent mottling.

4.2.1.3 Water

Most of Scott County lies within the Minnesota River-Shakopee (33) major watershed (Figure 4-7). The pipeline route connects to the Blue Lake Generating Plant within the Minnesota River minor watershed, with the route traversing three minor watersheds (33122, 33114 and 33131). The tributaries to the Minnesota River that are in the area of the pipeline route include the Prior-Deans Outlet Channel and an intermittent stream at the southern extent of the route. The closest designated trout stream is Eagle Creek, which is approximately 1.8 miles to the east of the Blue Lake Generating Plant, will not be impacted by the Project. Scott County has a number of lakes, with the largest lakes in the pipeline vicinity being the Thole-O-Dowd-Shneider Lake complex, Howard Lake and Dean Lake. Each of these lakes is also a DNR Protected Water, but will not be impacted by the Project.

4.2.1.4 Wetlands and DNR Protected Waters

Potential wetland areas were initially identified within the pipeline route corridor using off-site wetland identification methods. The off-site identification process included evaluating Natural Resource Conservation Service wetland determination maps, historic annual Farm Service Agency color aerial photographs (slides), recent aerial photographs, soil survey maps, topography, National Wetland Inventory data, and climatic data. All areas with any indicators of potential wetland conditions were identified and mapped for field evaluation.

All potential wetland areas were then briefly inspected in the field (often times from a distance) to verify wetland areas that could be easily identified, rule out areas that are clearly not wetland and determine the potential of other areas being wetland. Preliminary field review of the potential wetlands identified through off-site methods resulted in the 20 confirmed wetland areas and 21 probable wetland areas listed in Table C-3 in Appendix C. The locations of the wetlands and probable wetlands are shown on Figure 4-8. The 21 probable wetland sites will be further assessed once properties are accessible in late spring 2004.

The wetlands along the pipeline route are primarily depressional wetlands (Palustrine in the Cowardin classification system) ranging from wet meadows to shallow and deep marshes to ponds and forested wetlands. The Palustrine wetland classification includes all wetlands that are not along the edges of lakes or on river systems.

The wetlands identified along the pipeline route corridor are generally low quality, disturbed systems that may or may not be present within the final alignment of the pipeline. Many of the wetlands occur as drainage ditches or ponds constructed for conveying or storing storm water. Many of the remaining wetlands and potential wetlands are currently part of active agricultural fields either with annually seeded crops or haying operations. No high quality, native plant communities were identified in any of the wetlands along the pipeline route corridor. None of the wetlands along the corridor reviewed for the pipeline route are classified as MDNR Public Waters as defined by Minnesota Statutes, Section 103G.005, subd 15.

4.2.2 Potential Impacts and Planned Mitigative Measures

Construction along the pipeline route will cause temporary disturbance, and is not expected to have long term impacts in the area. No significant long term impacts to vegetation and wildlife; geology and soils; and water resources and wetlands are expected.

The pipeline route has been designed to avoid one area of biodiversity significance identified by the MDNR. The MDNR review identified a Minnesota County Biological Survey 'Site of High Biodiversity Significance' immediately south of the Plant site, south of U.S. Highway 169. The pipeline route crosses from the south side of U.S. Highway 169 to the north side west of this area to avoid impacting it (see Figure 4-4). With regard to the remaining portion of the pipeline route, no adverse effects on threatened or endangered species are anticipated.

Soil resources, particularly those designated as Prime Farmland soils, will be preserved by segregating of topsoil during excavation and backfilling and by employing erosion control best management practices as described in Section 5. The erosion control measures will also serve to protect area streams, lakes and wetlands from detrimental deposition of eroded soils.

After the final pipeline route is determined and additional field review can be completed, applications for the necessary wetland permits will be submitted to the Local Government Units administering the Wetland Conservation Act and the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. The pipeline is planned to be constructed primarily using open-cut methods. This construction will result in only temporary impacts to the wetlands present within the alignment, no permanent filling is planned. Wetlands crossed by the pipeline will be restored by replacing the subsoils and surface soils in a similar condition as before the project. The restoration will be conducted in accordance with any special requirements of those permits. The pipeline route does not cross any MDNR designated Public Waters so the project will not require a Public Waters Work Permit.

4.3 Cultural and Economic Resources

4.3.1 Existing Environment

4.3.1.1 Archaeological and Historical Resources

The Minnesota State Historic Preservation Office (SHPO) was asked to review their records to determine whether there are any reported historic or archaeological resources along the pipeline route. Their November 3, 2003 response (included in Appendix D) indicates that a number of historic properties and archaeological sites are found in the pipeline route vicinity. Approximately seven historic structures on the SHPO list are located within one mile of the proposed pipeline route. No listed archaeological sites are within one mile of the proposed pipeline route. Our field review indicated that the pipeline will be placed 100 feet or more from all of those structures. SHPO also indicated that additional sites may be present, but not yet included in the SHPO inventory.

4.3.1.2 Recreational Lands

There are a number of public parks in the pipeline area (Figure 4-5). The pipeline route passes to the north of Jackson Township Park, located southwest of the intersection of 130th Street and Marystown Road. Federal Parks include the Minnesota Valley National Wildlife Refuge and Recreation Area (MN NWRRA), which is 0.6 miles at a minimum to the north of the pipeline route. None of these lands will be impacted by the Project.

4.3.1.3 Economies

Industry in Scott County includes construction, manufacturing, wholesale trade, retail trade, as well as legal, financial and informational services. There are a range of other services offered commercial such as health care, insurance and waste management in addition to businesses commonly found in small cities. The Project will not impact those types of businesses.

The 2000 census indicates that approximately 0.2% of Scott County residents are employed in agriculture, forestry and fisheries. The primary crops grown in the agricultural areas of Scott County are corn, alfalfa hay and oats. Sheep, cattle, milk cows and hogs were historically important livestock in Scott County. The number of livestock on farms has not changed much since 1910, but there has been a gradual increase in the number of milk cows (National Agricultural Statistics Bureau, 2003).

The north-south pipeline route segment passes along land that is currently primarily used for alfalfa, corn and oats production. The construction of the pipeline may take a strip of land, typically about 50 feet wide, out of production for one season. Xcel Energy will negotiate compensation amounts for lost crop production with affected landowners as part of the construction easement acquisition process. Long-term impact to agricultural production will be limited to small parcels of land being taken out of production for locating the metering station and above-ground sectioning valves.

There is gravel quarry to the north of the Blue Lake Generating Plant, owned by JL Shiely Company. The Project will not impact this gravel quarry.

4.3.2 Potential Impacts and Planned Mitigative Measures

The pipeline will not adversely affect nearby cultural and economic resources.

The pipeline route will be immediately adjacent to established road right-of-ways and there should be no impacts to any buildings, including any historic structures. In order to ensure avoiding any impacts to historic and archaeological resources Xcel Energy will submit the final project plans to the SHPO office for review, with detailed maps of the project's area of impact, and with photographs of any nearby buildings/structures built before 1950.

Construction of the pipeline route will not have any impact on the cultural values of the area. The area presently has gas pipelines running along County

Highways 15 and 17. Since installation of the pipeline will not change land use, no change in the cultural landscape will occur.

The local economy will benefit from construction of the gas pipeline. Pipeline construction and the Blue Lake Generating Plant expansion it is being built to support will require highly-skilled, highly paid construction workers including heavy equipment operators, pipe fitters, iron workers, millwrights, boilermakers, carpenters, electricians, and other trades who will add significant payroll into the regional economy. Periodic major maintenance will also create local jobs.

The pipeline will contribute property taxes to the City of Shakopee, Scott County and the Shakopee School District. The state and Scott County will also benefit from income and sales taxes paid as a result of the construction of the Project.

5 Construction and Operation and Maintenance

5.1 Construction

Pipeline construction projects must be carefully planned to meet construction schedules and seasonal weather conditions. Brief summaries of the phases of pipeline construction are described below. Figure 5-1 illustrates the construction sequence for a gas pipeline.

5.1.1 Right-of-Way Preparation

The first step is to prepare the right-of-way (ROW). The ROW will be surveyed to assure accurate routing and layout of the pipeline. Storage areas required for equipment, pipe, and other materials would be acquired through private permission. These areas would consist of open areas that would be fenced as deemed necessary to protect equipment and materials as well as the public.

Fences along the ROW will be adequately braced before any opening to the fence is made. Any damage to fences, gates and cattle guards will be restored to the original condition or replaced. Impacts will be minimized to the extent possible.

In order to make the ROW into a suitable work area, a clearing and grading crew will prepare the route so the construction equipment can operate safely and efficiently. Clearing will follow accepted industry practices and sound construction guidelines. The minimum amount of aboveground vegetation and obstacles will be cleared to allow safe and efficient use of construction equipment. Debris created from ROW preparation will be disposed of using approved methods during construction.

The pipeline route will then be graded as necessary to prepare the surface for the passage of heavy equipment and vehicles for subsequent construction activities. Minimal grading will be necessary for most of the pipeline route. On steep terrain or where diversion dams must be built to facilitate construction, the areas would be restored upon completion to resemble original conditions. Excavation and grading will only occur where necessary to increase stability and

decrease the gradient of unstable slopes. In all cases, permit conditions will be followed and met to assure minimal disturbance and impact.

5.1.2 Trenching

Most trenching will be performed using a bucket-wheel ditching machine. Conventional tracked or wheeled backhoes will be used where ground conditions are unsuitable for a ditching machine and if a deeper or wider trench is needed. Trench dimensions will follow normal construction techniques and all regulatory requirements. In wet marshy areas, draglines and clamshells are used to do the ditching. Ditch plugs will be employed in areas with trench grades steeper than five percent (see Figure 5-2). Where pipe crosses highway or road ditches, the trench will be excavated deep enough to assure a minimum of 54 inches of cover over the pipe. All surfaced road crossings will be bored so that traffic flow will not be disturbed.

In areas where there is a need to separate topsoil and subsoil, a two-pass trenching method will be used. The first pass will remove topsoil and the second pass would remove subsoil. Soils from each of the excavations would be placed in separate areas. Spoil banks would contain gaps to allow storm water to flow away from the construction area to prevent it from backing up or flooding. Any rocks contained discovered in the excavation soils over the size of 6 inches will be removed and disposed of in a manner agreed to by the landowner and the contractor.

5.1.3 Stringing and Bending

To facilitate construction in an efficient manner, pipe will be placed along the ROW either from a storage area or from the pipe mill. The pipe will be unloaded by trucks equipped with side booms either prior to or after ditching.

After the joints of pipe are strung along the trench and before the sections of pipe are joined together, individual sections of the pipe are bent to allow for a uniform fit of the pipeline with the varying contours of the bottom of the trench and to accommodate changes in route direction. A track mounted hydraulic pipe-bending machine is normally used when installing 16-inch pipe as is being used in this project. The number of degrees of deflection is limited to 1-½ degrees per foot per diameter inch. Bends greater than allowed are fabricated in the pipe factory.

5.1.4 Line Up and Welding

Installation of the pipe continues with aligning the end bevels of the pipe with a line-up clamp to the proper spacing and alignment. The line up clamps are held until enough of the weld is completed to assure weld integrity.

Welding is the joining of the individual sections of pipe to form the pipeline. A qualified welder in accordance with welding procedures qualified to meet applicable code requirements must perform welding. They must be periodically tested to maintain the formidable qualifications for certification of pipeline welding.

Every weld will be inspected by radiographic examination to determine the quality of the weld. Radiographic examination is a nondestructive method of inspecting the inner structure of the welds to determine if any defects are present. Defects shall be repaired or removed as outlined in API 1104, the standard for “Welding of Pipelines and Related Facilities” which is incorporated by reference by 49 CFR 192. A certified inspection contractor unrelated to the pipeline construction contractor will perform the weld inspection.

5.1.5 Coating and Lowering-In

After welding is complete, the weld and the area around the weld will be wrapped to protect the pipe from corrosion. Side boom tractors lift the pipe and move it over the open trench. An electronic holiday detector is then used over the pipe to assure that the protective pipe coating is not damaged and will protect the pipe while underground. Any chips, gaps or other areas of inadequate coating are repaired before the pipe is lowered into the trench. When the detector determines the pipe is adequately coated, the pipe is lowered into the trench.

5.1.6 Backfilling and Testing

After the pipe has been lowered into the trench, the excavated soil will be filled back into the trench. The operation should be performed in a manner that will prevent damage to the pipe and coating from either the backfill material or the lowering equipment. Where the ditching process was used to separate topsoil and subsoil, the backfill is also installed by placing the subsoil into the trench prior to placement of the topsoil to maintain the soil segregation. The subsoil

will be compacted to as near as possible to the original density, and the topsoil will be replaced in a manner so as not to overly compact the soil. Excess backfill material will be bermed over the ditch centerline to permit natural settling.

After backfilling, the pipeline will be tested to ensure the system is capable of withstanding the operating pressure for which it was designed. The pipeline is filled with water and a pressure equal to 1.5 times the design pressure is maintained for a minimum of eight (8) hours. Water availability and terrain will determine the length of sections for testing. Test water will be disposed of according to permitting requirements.

5.1.7 Clean Up and Restoration

The final phase of the pipeline construction is clean up and restoration of the ROW. Any surplus materials and construction debris will be removed and disposed of according to permits or local codes. Restoration of the ROW surface would involve smoothing by chisel plow or disc harrow or other equipment, and stabilization where necessary. In non-cropland areas, the ROW will be re-vegetated according to agreement with the landowner or appropriate government agency. Erosion control measures will be employed in areas with ground surface grades steeper than five percent similar to those illustrated in Figure 5-3.

Xcel Energy understands that right-of-way protection, cleanup and restoration are important part of the Project and that the applicable requirements of Minnesota Rules 4415.0195 must be met. Conditions prescribed under those rules are as follows:

- A. The permittee shall comply with applicable state rules and regulations.*
- B. The permittee shall clear the right-of-way only to the extent necessary to assure suitable access for construction, safe operation, and maintenance of the pipeline.*
- C. Stream banks disturbed by pipeline construction must be stabilized with vegetation by the permittee using native plant species indigenous to the area or by other methods required by applicable state or federal permits or laws.*
- D. Precautions shall be taken by the permittee to protect and segregate topsoil in cultivated lands unless otherwise negotiated with the affected landowner.*

- E. Compaction of cultivated lands by the permittee must be kept to a minimum and confined to as small an area as practicable.*
- F. Precautions to protect livestock and crops must be taken by the permittee unless otherwise negotiated with the affected landowner.*
- G. All appropriate precautions to protect against pollution of the environment must be taken by the permittee.*
- H. All waste and scrap that is the product of the pipeline construction process must be removed or properly disposed of before construction ends.*
- I. Cleanup of personal litter, bottles, and paper deposited by right-of-way preparation and construction crews must be done on a daily basis.*
- J. The permittee shall repair or replace all drainage tiles broken or damaged during right-of-way preparation, construction, and maintenance activities, unless otherwise negotiated with the affected landowner.*
- K. The permittee shall repair private roads and lanes damaged when moving equipment or when obtaining access to the right-of-way, unless otherwise negotiated with the affected landowner.*
- L. The permittee shall replace or repair all fences and gates removed or damaged as a result of right-of-way preparation, construction, and restoration activities, unless otherwise negotiated with the affected landowner.*
- M. Shelterbelts and trees must be protected by the permittee to the extent possible in a manner compatible with the safe operation, maintenance, and inspection of the pipeline.*
- N. The permittee shall, to the extent possible, restore the area affected by the pipeline to the natural conditions that existed immediately before construction of the pipeline. Restoration must be compatible with the safe operation, maintenance, and inspection of the pipeline.*

5.2 Operation and Maintenance

This section addresses the requirements of Minnesota Rules 4415.0160 to provide, for public information purposes, a general description of the anticipated operation and maintenance practices planned for the proposed pipeline.

This pipeline will be built, operated and maintained under the jurisdiction of the Minnesota Office of Pipeline Safety (MNOPS). As a result, this pipeline will meet all requirements of the DOT Minimum Federal Safety Standards in Title 49 of the CFR, Part 192 (49 CFR 192). These regulations are designed to ensure adequate protection for the public from failures of natural gas pipelines and related facilities. Part 192 defines and specifies the minimum standards for operating and maintaining pipeline facilities and the establishment of an Emergency Plan, which provides written procedures to minimize hazards from a gas pipeline emergency. Key elements of the plan must include procedures for:

1. Receiving, identifying, and classifying emergency events – gas leakage, fires, explosions and natural disasters;
2. Establishing and maintaining communications with local fire, police and public officials, and coordinating emergency responses;
3. Making personnel, equipment, tools and materials available at the scene of an emergency;
4. Protecting people first and then property, and making them safe from actual or potential hazards, and
5. Emergency shutdown of the system and safely restoring service.

Specifically, the safety standards in Part 192 require each pipeline operator to:

1. Develop an emergency plan, working with local fire departments and other agencies to identify personnel to be contacted, equipment to be mobilized, and procedures to be followed to respond to a hazardous condition caused by the pipeline or associated facilities;
2. Establish and maintain a liaison with the appropriate fire, police and public officials when responding to emergencies;
3. Establish a continuing education program to enable customers, the public, government officials, and those engaged in excavation activities to recognize a natural gas pipeline emergency and report it to appropriate public officials. Xcel Energy currently operates natural gas pipeline facilities that are under the jurisdiction of the MNOPS and subject to the requirements of 49 CFR 192. Xcel Energy currently has manuals, procedures and programs in place to meet the requirements outlined above. Before placing the pipeline in service, Xcel Energy would revise its manuals, procedures and programs to include the new pipeline facilities. Xcel Energy will operate all of its pipeline facilities in compliance with applicable pipeline safety regulations.

Xcel Energy will inspect and maintain its pipeline facilities in compliance with MNOPS regulations. Semi-annual inspections of the pipeline ROW would be conducted for gas leak detection and cathodic protection surveys would be conducted annually. Any additional inspections or maintain that may be required do to the new Federal Pipeline Integrity rulemaking, or any other code requirements, will be performed on the pipeline facilities.

Xcel Energy is currently a member of the Gopher State Excavators One-call system that is vital in helping to prevent damage to underground pipelines by excavators and others performing underground construction.

References

- Balaban and McSwiggen (1982). Geologic Atlas Scott County, Minnesota. St. Paul, MN, University of Minnesota.
- City of Shakopee (2001). City of Shakopee Zoning Ordinance
- Cummins, Edwards, et al. (1959). Soil Survey Scott County Minnesota. Washington, DC, US Government Printing Office.
- Marschner, F. J. (1974). The Original Vegetation of Minnesota, a map compiled in 1930 by F.J. Marschner under the direction of M.L. Heinselman of the U.S. Forest Service. St. Paul, MN, Cartography Laboratory of the Department of Geography, University of Minnesota.
- National Agricultural Statistics Bureau (2003). <http://www.nass.usda.gov:81/ipedb/>, USDA.
- Scott County (2001a). 2020 Scott County Comprehensive Plan Update
- Scott County (2001b). Scott County Zoning Ordinance No. 3 and Map
- U.S. Census Bureau (2003). <http://www.census.gov/>.